without (P<0.01). COX proportional hazards model of multi-factor analysis showed that increased PTX3 was an independent risk factor for adverse cardiovascular events in patients with chronic heart failure (relative risk (RR)=4.224, P<0.01; 95% CI 1.130-15.783).
Conclusions: PTX3 levels were positively and significantly associated with the severity of heart failure. Chronic heart failure patients with increased PTX3 had a higher risk of developing adverse cardiovascular events. Increased PTX3 was probably the long-term independent predictor for patients with chronic heart failure.

GW25-e1609

The effects of Ginkgo biloba extract on the parameters of prothrombotic state - a meta-analysis

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Objectives: To evaluate the effects of a single dose of Ginkgo biloba extract on the parameters of prothrombotic state (PTS).
Methods: Database including MEDLINE, EMBASE, Cochrane Library, The Cochrane Central Register of Controlled Trials, Chinese Biomedical Literature Database (CBM), China National Knowledge Infrastructure (CNKI) and Wanfang Data were searched from inception to April 2014. Randomized controlled trials (RCTs) involving the healthy volunteers or patients receiving ginkgo biloba extract as compared with placebo were included. Parameters of the prothrombotic state including: platelet aggregation, activated partial thromboplastin time (APTT), prothrombin time (PT), plasma fibrinogen, blood viscosity, blood flow velocity. Risk of bias of allocation sequence, allocation concealment, blinding, incomplete outcome data, selective outcome reporting, and other biases were assessed by the Cochrane risk of bias assessment tool. The data was analyzed by the Cochrane collaboration's RevMan 5.0. The following statistical methods were used: weighted mean difference (WMD), standardized mean difference (SMD) and 95% confidence intervals (CIs). The results of the heterogeneity of the included studies were statistically homogeneous (P>0.1, I^2 <50%), the fixed effect model was used for Meta analysis; there is statistical heterogeneity such as the testing results (P<0.1, I^2>50%), then find out the heterogeneous sources according to the sensitivity analysis, subgroup analysis or meta-regression analysis.
Results: Fourteen RCTs from ten countries with 440 participants were analyzed. Ginkgo biloba extract group has significant improvements in the partial parameters of prothrombotic state as compared with placebo group. The result showed that Adenosine 5'-diphosphate (ADP)-induced platelet aggregation was significantly inhibited [WMD -7.53%, 95%CI (-14.27, -0.78), P=0.03], the blood viscosity was significantly reduced [WMD-1.40mPa·s, 95%CI (-1.91, -0.89), P<0.00001], and the blood flow was increased [SMD 0.63, 95%CI (0.17, 1.09), P=0.008]. However, there were no significant differences observed between GBE and placebo treatments in APTT [WMD -0.25s, 95% CI (-0.68, 0.19), P=0.26], PT [WMD -0.07s, 95% CI (-0.37, 0.23), P=0.64], plasma fibrinogen [WMD -4.94 mg/dl, 95% CI (-23.02, 13.15), P=0.59].
Conclusions: Based on the result of Meta-analysis about the parameters of prothrombotic state, Ginkgo biloba extract may significantly reduce blood viscosity and also increase blood flow velocity as compared with placebo. GBE may significantly improve the partial parameters of prothrombotic state and inhibit the formation of thrombus.

GW25-e1168

Chlorogenic acid prevents Isoproterenol-induced myocardial hypertrophy in mice in vivo

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Objectives: Cardiac hypertrophy is an independent risk factor for cardiovascular disease and its subsequent progression to heart failure represents a major cause of morbidity and mortality all over the world. Chlorogenic acid (CGA) is an important component of Chinese herbal medicine, which has a wide range of biological activity, but the effct of CGA on heart in vivo is still unclear. The purpose of this research is to investigate that whether CGA has a protective effect on isoproterenol-induced myocardial hypertrophy in mice in vivo.
Methods: Mice were subcutaneously injected with normal saline or 1, 5and 10mg/kg/day CGA for 3 days, and the next day treated with normal saline or 30mg/kg/day isoproterenol for 7 days. All mice were detected by Vevo 770 ultrasonic diagnostic apparatus. Both heart weight and body weight were measured in the end. Both left ventricle and heart were made into Paraffin sections which were stained by HE.
Results: In 5 and 10 mg/kg/day CGA groups EF value and FS value were significantly increased, however the heart weight index is significantly decreased comparing with normal saline group. According to the biopsy, left ventricular posterior wall (LVPW) in experimental group decreased and cardiac chambers became larger comparing with normal saline group.
Conclusions: This study mainly reveals that CGA is helpful to heart, and it has a significant protective effect on myocardial hypertrophy in vivo.

GW25-e4202

Analysis for readmission of the heart failure patients

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Objectives: Heart failure (HF) affects many people worldwide, and it is generally expected that the number of people with HF will increase because of the aging population and better survival rates of patients after a myocardial infarction. Readmission rates usually vary between 25% and 50% within 6 months after the first hospitalization for HF and account for approximately 70% of the costs. Despite efforts to improve outcomes in heart failure (HF), readmission rates remain relatively high. Reasons for readmission from different perspectives (patient, caregiver, health care providers) may help to optimize the future management of patients with HF. The aims of this study are to :1) gain insight into reasons for HF readmission from the perspective of patients, caregivers, cardiologists, and HF nurses; 2) examine similarities and differences in perspectives on the reason for an HF readmission, and 3) describe possibilities to prevent an HF readmission from different perspectives.
Methods: A descriptive design was used with data from a substudy of the Coordinating study evaluating Outcomes of Advising and Counseling in Heart failure (COACH), a multicenter study on the effects of education and counseling in HF. Between November 2010 and May 2013, 918 patients from the first hospiltal of Jilin Univercity were included in the COACH study. Inclusion criteria were hospitalization for symptomatic HF, confirmed by the cardiologist, and underlying heart disease as the cause of HF. Exclusion criteria were an invasive intervention within the last 6 months or planned in the next 3 months, participation in a study requiring additional visits to a research nurse, and evaluation for heart transplantation. After written informed consent to participate in the study, patients were followed for a period of 18 months. Patients were randomized to 1 of 3 study groups: basic support, intensive support, or control.
Results: Data on reasons for readmission were collected on 173 readmissions. Perspectives of patients, caregivers, cardiologists, and HF nurses were collected by interview and questionnaire. Worsening HF as the sole reason for readmission was reported most often; however, 36% of caregivers, 56% of patients, and 63% to 65% of health care providers indicated that other factors, such as comorbidity, nonadherence, and nonoptimal medication, were important contributing factors. In only 34% of readmissions, patients and their caregivers agreed with health care providers on the underlying reason. Respondents reported that 23% to 31% of the readmissions could probably have been prevented if adherence were higher, patients requested help earlier, and adequate multidisciplinary professional help were available.
Conclusions: Firstly, to prevent future readmissions of patients with HF, it is important to fully understand the reasons for readmission by gaining insight on the reason for readmission from different perspectives. Adding information from different perspectives provides a complete picture of reasons for the adverse outcome. Secondly, we may need another approach to prevent adverse outcomes in which other medical problems and new strategies, such as telemedicine or other home-based interventions to improve adherence have to be considered. Finally, insufficient professional help, nonadherence, and knowledge deficit were reported moreoften in the control group as a precipitating factor for readmission than in the intensive treatment group.

GW25-e1575

The increased visceral fat thickness in NAFLD patients enhances the risk of coronary artery stenosis (CAS)

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Objectives: Recent studies have shown that NAFLD may be closely related with CAS. In this research, By measuring the visceral fat thickness (VFT), it include the fat of epicardial, before the liver, Around the kidney, Next to the kidney, and evaluating the severity of CAS (according to coronary angiography), we want exploring the relationship between NAFLD, VFT and the severity of CAS.
Methods: (1) The relationship between NAFLD, VFT and severity of CAS (323). By coronary angiography, the subjects were divided into three groups as bellow, the normal group (without stenosis), the moderate stenosis group (the target lesions less than 75%), the severe stenosis Group (the target lesions more than 75%).The number and VFT of each group in NAFLD patients were measured. (2) The correlation between NAFLD and VFT in the severe stenosis group (197). The severe stenosis group was divided into two groups that NAFLD group and non NAFLD group, according to coronary score, each group was divided into 3subgroups (3-6, 6-10, more than 10 points). The VFT of each group was measured.
Results: (1) Along with the increasing degree of CAS, the proportion of NAFLD was significantly increased by 16% and 19% (the moderate stenosis was 71%, the severe stenosis was 74%) than in the normal group(without coronary artery stenosis was 55%), the total VFT also increase, especially the epicardial layer (the moderate stenosis increased by 23% and the severe stenosis increased by 54%). (2) In the severe CAS group, the patients were divided into NAFLD group and non NAFLD group. compared with non NAFLD group, the fat of epicardial, before the liver, Around the kidney, Next to the kidney and the coronary score significantly increased in the NAFLD group (10%, 22%, 32%, 36% and 27%, respectively) .Along with the increase of coronary score , the epicardial fat thickness was increased significantly (16% and 34%, respectively) in the non NAFLD group; but the epicardial thickness of the NAFLD group was slightly increased (8% and 8%, respectively). In the two groups, the VFT of the other three sections have no significant change among the subgroups.